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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/736,393	12/15/2000	Joseph E. Augenbraun	WGATE6-7	8038

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EXAMINER

SALCE, JASON P

ART UNIT PAPER NUMBER

2614

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/736,393	Applicant(s) AUGENBRAUN ET AL.	
	Examiner Jason P. Salce	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 21-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 21-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see applicant's arguments, filed 10/10/2005, with respect to the rejection(s) of claim(s) 1-9 and 21-28 under U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Shoff and Biliris.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 4-6, 8-9, 21-25 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoff et al. (U.S. Patent No. 6,240,555) in view of Biliris et al. (U.S. Patent No. 5,684,539).

Referring to claim 1, Shoff discloses a network headend for accessing information for one or more sources, and broadcasting said information (see Column 2, Lines 57-64).

Shoff also discloses a plurality of downstream channels interfaced to said headend for transmitting said information (see Column 3, Lines 14-15 for tuning to a specific channel and Column 4, Lines 56-58 for receiving multiple programs through a

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pipeline from the headend to the subscriber, therefore, a plurality of downstream channels inherently exists).

Shoff also discloses a plurality of terminal devices for receiving said downstream channels (see Column 4, Lines 16-18 and 22-29), each said terminal device including:

1) a tuner for receiving and selecting said downstream channels (see Column 8, Lines 10-14).

2) a terminal processor (see Column 8, Lines 19-21) for receiving channel selection and information requests from a user (see Column 8, Lines 62-63), and instructing said tuner to select one of said downstream channels (see Column 8, Lines 63-64), said terminal processor including programming for receiving an information request from a user (see Column 8, Lines 35-38), and in response thereto, instructing said tuner to select, via one-way hyperlinking, one of said downstream channels on which said requested information is being transmitted from said headend (see Column 9, Lines 8-18). Note that when the user changes the channel, a check is made to see if the channel is interactive, if yes, the information is acquired from the dedicated (downstream) channel, and therefore the second tuner disclosed in Figure 5 (and Column 8, Lines 14-18) must be tuned to received the supplemental content, which can be a web content, via one-way hyperlinking (see Column 6, Lines 30-48).

Shoff also discloses a headend adapted to transmit video signals in at least one of the plurality of downstream channels (see Column 2, Lines 56-63).

Shoff is silent in teaching the transmitting of a single I-frame a plurality of times.

Biliris discloses transmitting a single I-frame a plurality of times in a downstream channel by the use of trick play modes (see Column 8, Line 2 through Column 10, Line 2). For example, if a user plays an MPEG video and then rewinds, the I-frame would be transmitted twice, thereby providing the single I-frame a plurality of times.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the video transmission system, as taught by Shoff, using the multiple frame transmission scheme, as taught by Biliris, for the purpose of allowing the system to respond to viewer-generated commands to control the viewing of a program using trick play modes (see Column 2, Lines 47-52 of Biliris).

Referring to claim 2, Shoff discloses a memory containing a channel mapping database for identifying, for each of a plurality of possible information requests received from a user, a one of said channels on which said requested information is being transmitted from said headend (see Figure 3 and Column 5, Lines 61-67 and Column 6, Lines 1-6).

Referring to claim 4, Shoff discloses that the terminal processor is further programmed to identify from said channel mapping database, a time at which said one of said information data streams containing said requested information is to be transmitted on said one of said downstream channels (see Figure 3 which shows that CBS will transmit Murder She Wrote at 8pm on Thursday), and for instructing said tuner to select said one of said downstream channels at said time (see Column 8, Lines 62-63).

Referring to claim 5, Shoff discloses that the terminal device further includes a memory for storing said information data streams (see Column 2, Lines 66-67 and Column 3, Lines 1-10 for storing the EPG, which contains the supplemental content information in memory), and a display manager for formatting said information for display on a video monitor interfaced to the terminal device (see Column 8, Lines 38-44).

Referring to claim 6, Shoff discloses a picture-in-picture application for simultaneously displaying first information stored in memory and second information being received on one of said downstream channels (see Figure 8c for showing the incoming program and supplemental content).

Referring to claim 8, Shoff discloses that requested information comprises Internet web page data, said web page having content that is related to a video program that is being received by said tuner at a time that said information is received by said terminal processor (see Column 9, Lines 8-53 and Figure 3 and Column 6, Lines 30-48).

Referring to claim 9, Shoff discloses an input device for entering information requests into said terminal processor either through actuation of a button on an input device, or selection of an on-screen button displayed on a video image (see element 72 in Figure 4 and Column 8, Lines 35-38).

Referring to claim 21, see the rejection of claims 1 and 5.

Referring to claim 22, see the rejection of claims 2 and 3.

Referring to claims 23-25 and 27-28, see the rejection of claims 4-6 and 8-9, respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3, 7 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoff et al. (U.S. Patent No. 6,240,555) in view of Biliris et al. (U.S. Patent No. 5,720,037) in further view of Eyer et al. (U.S. Patent No. 5,982,445).

Referring to claim 3, Shoff and Biliris disclose all of the limitations in claim 2, as well as Shoff disclosing that each of said information data streams contains information identified by a corresponding one of said plurality of information requests (see Figure 3 for the supplemental content field, which represents information that is used to select a web site for viewing), and said channel mapping database further includes timing information identifying a time slot in a multiple time slot sequence when each of said information streams is to be transmitted (again see Figure 3 for a time at which the interactive program is to be aired).

Shoff fails to disclose a first multiplexer for multiplexing a plurality of information data streams on one of said downstream channels.

Eyer discloses a first multiplexer 115 in Figure 1 for multiplexing information streams on a downstream channel (see Column 8, Lines 12-16).

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At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the headend, as taught by Shoff and Boyce, to utilize the multiplexer, as taught by Eyer, for the purpose of providing the ability to deliver an aggregate bandwidth of many channels to the user.

Referring to claim 7, Shoff discloses encoding information transmitted to the user (see Column 12, Lines 50-53), but is silent about the headend including an encoder for digitally encoding information data streams to be broadcast and said terminal device further includes a decoder for decoding said information data streams.

Eyer discloses encoding a signal transmitted from a headend to a plurality of clients using the MPEG-2 standard (see Column 8, Lines 12-19 and Figure 1). Eyer also discloses decoding these signals, using a decoder (element 184 in Figure 1) for decoding said information data streams (see Column 8, Lines 35-38).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the headend and terminal device, as taught by Shoff, using the encoder and decoder, as taught by Eyer, for the purpose of conserving bandwidth by compressing the information data streams into a smaller sized segment of information.

Referring to claim 26, see the rejection of claim 7.

Conclusion

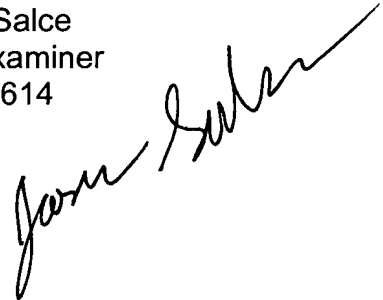
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Salce whose telephone number is (571) 272-7301. The examiner can normally be reached on M-F 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason P Salce
Patent Examiner
Art Unit 2614

A handwritten signature in black ink, appearing to read "Jason Salce", written diagonally across the signature block.

December 14, 2005